

pages 46 and 49, respectively.

Claim 12 has been made to depend on elected Claim 4.

REMARKS

Favorable reconsideration of this application is requested.

Claims 1-6, 8, 9 and 12-15 are in the case.

Claims 1-3, 12 and 13 stand withdrawn from further consideration as not reading on the elected invention.

It is submitted that upon allowance of the elected claims, nonelected Claims 12 and 13 be rejoined therewith, consistent with MPEP §821.04.

Claims 4-6, 8, 9, 14 and 15 are the elected claims.

The discussions with the Examiner, Ms. Hamilton, on March 17 and 19, 2003 are herewith acknowledged with appreciation. As pointed out during said discussion, no claims are identified for the rejection under 35 U.S.C. §102(e) over Shimizu et al in paragraph 14 at page 8 of the Examiner's Action. The Examiner subsequently informed the undersigned that this rejection is to be disregarded.

With regard to the sixteen rejections of the claims under 35 U.S.C. §102(b) and §102(e), only the rejections of Claims 4-9 under 35 U.S.C. §102(e) over Kokai et al or Suzuki, and of Claims 4-8 under 35 U.S.C. §102(e) over Iguchi et al still are applicable in view of the amendment to the claims. Specifically, by incorporating the limitations of Claim 7 into Claim 4, only these rejections are applicable, which include a rejection of Claim 7.

The invention to which the claims have now been limited is directed to a barrier rib for an EL display element which is formed from a radiation sensitive resin composition comprising (A) an alkali soluble resin, (B) a polymerizable compound having an ethylenically

unsaturated bond, and (C) a radiation sensitive polymerization initiator, said barrier rib having a trapezoidal cross sectional form with a longer top side than the bottom side and an angle formed by a straight line connecting the upper pattern edge and the lower pattern edge and the top side of 15 to 75°.

This claimed feature of the barrier rib having a trapezoidal cross sectional formed as defined manifestly is not disclosed by the prior art cited and relied upon by the Examiner. As disclosed in the specification, due to the barrier rib having such defined inversely tapered form, the deposition of an organic EL medium from above and not in an oblique direction is made possible. That is, the organic EL medium is deposited from above, whereby the organic EL medium is uniformly adhered to an opening between barrier ribs, thereby making it possible to secure sufficient brightness of a display element. When a cathode material is deposited from above, it is possible to prevent the cathode material from entering the inversely tapered lower portion, thereby making it possible to secure insulation between cathodes.

All of the applicable references cited and relied upon by the Examiner relate to plasma display panels, not to an EL element, i.e., an electroluminescence element as claimed. They are thus directed to completely different fields of endeavor, both in structure and function, and thus neither disclose, nor make obvious, a barrier rib as claimed having the defined characteristics and properties making such barrier ribs suitable for the claimed purpose. Such use is also so specifically defined by Claims 9 and 15.

Further, the significance and materiality of the claimed limitation with regard to the barrier rib having a trapezoidal cross sectional form as particularly defined by the claims whereby superior result-effectiveness is obtained is not disclosed by the references. Note, in particular, Claim 14 wherein the angle is specifically defined by degrees consistent with the

examples in the case whereby superior results are obtained.

Further, with regard to the additional limitations of Claim 8 the following is pointed out. By controlling the amount of the volatile component, the entry of impurities into the EL layer can be prevented, thereby making it possible to prevent such problems as the occurrence of a lighting failure of the EL display element and a reduction in the brightness of emitted light. Such also is not disclosed by the references.

Also, when the barrier rib of the present invention contains a colorant, it has light screening properties and preferably an OD value of 0.1 or more when it has a film thickness of 1 μ m. When the OD value is smaller than 0.1, the light emitted from EL easily transmits the barrier rib and it is difficult to prevent a reduction in light emission contrast. Thus, the additional limitation as called for by Claim 6 providing for unobviously superior results additionally is not disclosed by the art.

Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §102 is requested.

With regard to the rejection of Claims 4-9 under 35 U.S.C. §112, second paragraph, the following is submitted in traversal thereof.

As is evident from Lee et al, cited by the Examiner, the meaning of an "EL display element" is well known and is an art recognized expression for an electroluminescent display element. Note paragraphs 0006 to 0008 of this reference. See also the Memorandum by Deputy Commissioner Kunin of January 17, 2003, relative to rejection for indefiniteness.

As to the meaning of "OD", the Examiner's assumption is correct and such expression has thus amended to read "optical density", consistent with page 37 of the specification.

As to Claim 8, it has been amended in a manner believed to overcome the Examiner's criticisms, the amendment being consistent with page 36, lines 30-35 of the specification.

No
comment

Withdrawal of the rejection of the claims under the second paragraph of 35 U.S.C.
§112 thus is requested.

It is submitted that this application is now in condition for allowance and which is
solicited.

Respectfully submitted,

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Amendment Filed: HEREWITH

IN THE CLAIMS

--4. (Twice Amended) A barrier rib for an EL display element which is formed from a radiation sensitive resin composition comprising (A) an alkali soluble resin, (B) a polymerizable compound having an ethylenically unsaturated bond, and (C) a radiation sensitive polymerization initiator, said barrier rib having a trapezoidal cross sectional form with a longer top side than the bottom side and an angle formed by a straight line connecting the upper pattern edge and the lower pattern edge and the top side of 15 to 75°.

6. (Amended) The barrier rib for an EL display element according to claim 5 which has an [OD] optical density value of 0.1 or more with a film thickness of 1 μm .--

7. (Canceled).

--8. (Amended) The barrier rib for an EL display element according to claim 4, [wherein the amount of] which comprises a volatile component generated by heating from 25°C to 200°C [is] in an amount of 10% or less of the weight of the barrier rib.

9. (Amended) An EL display element comprising the barrier ribs of claim 4[or 5].

12. (Amended) A method for forming a barrier rib for an EL display element of claim 4, which comprises:

applying a solution of a radiation sensitive composition comprising (A) an alkali

soluble resin, (B) a polymerizable compound having an ethylenically unsaturated bond and (C) a radiation sensitive polymerization initiator to the surface of a substrate;

pre-baking the so-formed coating film;

exposing the coating film to the radiation through a predetermined pattern mask; and

developing the exposed film to form the barrier rib for an [E:] EL display element.--

14. (New).

15. (New).